

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

We claim:

1-3. (cancelled)

4. (currently amended) A method of manipulating neuronal ion channels, comprising: transfecting a cell that expresses an mRNA encoding a Kv3.4 protein with a vector encoding an siRNA directed against said mRNA encoding a Kv3.4 protein, wherein said siRNA ~~targets positions 2222-2283 is complementary to target sequence within a portion of SEQ ID NO:6 of a Kv3.4 nucleic acid described by GenBank Accession Number X62841 starting with gcagaatggtgacgctaata and ending with ggcagtgttgagccgaaac~~, and wherein said siRNA is capable of inhibiting Kv3.4 expression in said cell, and wherein said cell is located in vitro or ex vivo.

5-9. (cancelled)

10. (previously presented) The method of claim 4, further comprising the step of transplanting said cell into a subject.

11-16. (cancelled).

17. (previously presented) The method of claim 4, wherein said siRNA is directed toward a Kv3.4 target selected from the group consisting of SEQ ID NOs: 3 and 4.